



April 11, 2012

Regulatory Department

VIA: email trovato.ramona@epa.gov

Ms. Ramona Trovato
Office of Research and Development
USEPA Headquarters
1200 Pennsylvania Avenue, N.W.
Mail Code: 8101R
Washington, DC 20460

Re: Horizontal Drilling

Dear Ms. Trovato:

Pursuant to our discussions about the potential need to install horizontal monitoring wells at the proposed prospective study site, attached is a technical memorandum that outlines several issues that should be addressed before Chesapeake could agree to the installation. Four of the critical issues are detailed below:

First and foremost we want to re-emphasize that site characterization may reveal that installation of these non-standard wells is unnecessary.

Second, we have conditionally determined that the best possibility for installing the horizontal monitoring wells, if needed, would be after our Mississippi Limestone well is drilled but prior to hydraulic fracturing. As we have discussed, EPA will be required to accept all liability related to potential damage to the Chesapeake well and the environment related to the installation and use of these wells. This will be an extremely important issue that should be resolved quickly given the multi-million dollar investment Chesapeake has made, and will continue to make, at the location.

The third issue is the ability for EPA's contractor to very accurately steer and map the location of the horizontal monitoring wells and formally agreeing to an anti-collision policy which includes a requirement that the horizontal monitoring wells will not be drilled within a 30 foot radius of Chesapeake's well, regardless of groundwater velocity.

The fourth issue to resolve, as mentioned by the Oklahoma Water Resources Board and the contract water well driller during our March meeting, is a detailed procedure for plugging and abandonment.

Finally, we would request that your agency allow that, should horizontal monitoring wells be required, Chesapeake's comments about the non-standard nature of the wells as well as our attached technical memorandum be included in the final study report.

Thank you for continuing to dedicate resources to this project. Chesapeake remains committed to a study based on sound science and recognized and accepted protocols. Given the importance of domestic oil and natural gas as an energy source for our country's quality of life, independence, and environment, we feel there is no more important task at hand than to continue to bolster the public's confidence that we can, and do, explore and produce this important source of energy safely.

Best regards,

Chesapeake Energy Corporation

A handwritten signature in blue ink, appearing to read 'Steph R. Timmermeyer', with a long horizontal flourish extending to the right.

Stephanie R. Timmermeyer
Director – Federal Regulatory Affairs

SRT:rr